SVERDRUP ENVIRONMENTAL, INC.

TECHNICAL MEMORANDUM

March 4, 1999

TO: Dan Wall, USEPA Region VII

40331960 Superfund

FROM:

Jon B. Niffenegger, Sverdrup Environmental

SUBJECT: Review comments on Site Characterization Summary Report for the West Lake Landfill OU2, Bridgeton, Missouri

The following technical memorandum presents review comments stemming from the review of the Site Characterization Summary Report (Volume 1 of 2) for the West Lake Landfill Operable Unit 2 RI/FS, prepared by Water Management Consultants, Inc. and dated December 1997.

GENERAL

• The report appears to be a little light in specific details and relies heavily on the previous work done for OU 1. If this report was not intended to be a "stand alone" document but a supplement to the existing documents, then this should be more clearly related to the reader. In addition, better references to the existing data presented in the previous reports should include section, page numbers, table number, etc..

CHAPTER 1 – PURPOSE AND OBJECTIVES

No specific comments.

CHAPTER 2 – BACKGROUND AND SITE DESCRIPTION

• May want to include additional details as to how and why the site was divided into separate Operable Units and what is encompassed under each Operable Unit.

CHAPTER 3 – BIOLOGICAL CHARACTERISTICS

No specific comments, see general comment.

CHAPTER 4 – GROUNDWATER QUALITY

- Section 4.1 has a groundwater quality monitoring network been established, and if so define network including; well name, depth, elevation, and hydrogeologic zone monitored.
- Section 4.1 Include table of groundwater piezometric levels from the 49 piezometers and 24 other existing wells. In addition, piezometric surface maps would be helpful in evaluation groundwater flow.
- Table 4.2 what are the Analytical Methods used.
- Section 4.4.2 were VOCs, SVOCs, pesticides, or PCBs detected in any of the other background wells (S-80, I-50, or PZ-300-AS)
- Section 4.5.1 in what piezometer was the pesticide Gamma-chlordane detected in.
- Section 4.5.3 include SVOC constituents and concentration detected in PZ-303-AS.
- Table 4.11 and 4.13 what is defined as "reporting limits" MCLs?
- Section 4.2 a table detailing which hydrogeologic zone each well within each of the clusters is monitoring would be helpful.

CHAPTER 5 – SURFACE WATER AND SEDIMENT QUALITY

- Section 5.1 should that be TPH instead of TOC results in the last sentence of the first paragraph.
- Section 5.2.2 the text should include the concentrations of acetone and methyl ethyl ketone detected in the upstream sediment sample.

CHAPTER 6 - LEACHATE SAMPLING AND ANALYSIS

 A table including the results of the inorganic compounds and radionuclide sampling would be helpful.

CHAPTER 7 - SEEP SURVEY RESULTS

• No specific comments

CHAPTER 8 - LANDFILL GAS CHARACTERIZATION

• A table listing the concentration of volatile organics detected detected in the PZ-1201-SS landfill gas sample would be helpful.

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CHAPTER 9 - ALLUVIAL SOIL ORGANIC ANALYSIS

• No specific comments

CHAPTER 10 – QUALITY ASSURANCE SAMPLES AND DATA VALIDATION

• Section 10.1 - Sampling methods may be more easily presented in tabular form.

CHAPTER 11 - SUMMARY

No specific comments